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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,836	10/23/2000	Morten Eriksen	REF/ERIKSEN/221	8635

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06/04/2003

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EXAMINER

SHARAREH, SHAHNAM J

ART UNIT	PAPER NUMBER
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1617

13

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/693,836

Applicant(s)

ERIKSEN ET AL.

Examiner

Shahnam Sharareh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/3/2003, 3/10/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 18-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Amendment filed on February 03, 2003 has been entered. Claims 1-17 are under consideration. Claim 1-26 are pending. Claims 18-21 are withdrawn because they are not directed to the elected invention.

Applicant's request to rejoining claims 11-13 for prosecution has been considered, the claims have been rejoined. However, as Applicant's mistake triggered the withdrawal, the previous Obviousness rejection have been withdrawn in view of the new grounds of rejection.

Double Patenting

Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-3, 5-10, 12-14, 18 of U.S. Patent No. 6,375,931 for the reasons of record.

Applicant's argument have been fully considered but are not found persuasive. First Examiner points out that during patent examination, the pending claims are "given the broadest reasonable interpretation consistent with the specification." MPEP 2111. Second, incorporating limitations of the specification into a claim to thereby narrow the scope of the claim is improper. see also *In re Morris*, 127, F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-1028 (Fed. Cir. 1997). In the instant case, regardless of the behavior of claimed composition as set forth in Examples 1-2, the scope of the pending claims overlap with the patented claims of US Patent 6,375,931. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to practice the instant claims when in possession of the patented claims, because the pending

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claims merely further limit the inherent characteristic between the components (i) and (ii) of the patented claims.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger et al (WO 97/40858) and Lohrmann et al US Patent 5,716,597 in view of Schutt et al US Patent 5,605,673.

Unger teaches contrast agents for ultrasound imaging comprising a perfluorocarbon gas such as perfluorobutane. Pages 11-14, claims 1-5. Unger uses negatively charged lipid blends and further states that total concentrations of lipid is preferably at least 80%. (pages 15, line 18-34; page 16, lines 16-28). Unger doesn't employ a second perfluorocarbon as a dispersible component.

Lohrmann teaches oil-in-water emulsion that can contain a gas such as perfluorobutane and a phospholipid stabilizer (see abstract, col 2, lines 39-col 3, lines 4; col 4, lines 26-50). Lohrmann's stabilizer may be used singly or in various combinations in the emulsions of the present invention. (col 5, lines 6-7). Like Unger, Lohrmann does not use a perfluoromethylcyclopentane as the dispersible component.

Schutt teaches ultrasonic contrast agent comprising microbubble encapsulating a first and a second perfluorocarbon gases in combination with or without an osmotic gas. (see abstract, and col 14-18). Schutt further claims that such gases may be a combination of perfluorobutane and perfluoromethylcyclopentane. (See table 1, claims

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43, and 54). Applicant's attention is drawn to claims 29 and 82 of Schutt wherein Schutt clearly sets forth that a secondary osmotic gas can be a perfluorocarbon including perfluorohexane or trichlorofluoroethane (Freon 113). Therefore, liquid perfluorocarbons including perfluoromethylcyclopentane are viewed to act as art equivalents in ultrasound contrast agents.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the compositions of Unger or Lohrmann with those of Schutt, because as reasoned by Schutt two perfluorocarbon moieties can be combined with each other and that a secondary liquid perfluorocarbon moiety could enhance the stability of the microbubble during ultrasound imaging. The ordinary skill in the art would have had a reasonable expectation of success, because liquid perfluorocarbons are expected to act as art equivalents in ultrasound contrast agents, so substituting perfluoromethylcyclopentane in place of perfluorohexane would have been an obvious modification.

Conclusion

No claims are allowed. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). All claims are drawn to the same invention and could have been finally rejected on the grounds and art of record in the next Office action if the claims had not been previously withdrawn by the Applicants.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahnam Sharareh whose telephone number is 703-306-5400. The examiner can normally be reached on 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, PhD can be reached on 703-308-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1123.

ss
June 1, 2003


RUSSELL TRAVERS
PRIMARY EXAMINER
GROUP 1200